

TRANSMITTAL OF APPEAL BRIEF (Small Entity)

Docket No.
PNL21365

In Re Application Of: John W. Clapper, Jr.

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/786,295	02/26/2004	Alicia M Torres	24257	3671	3436

Invention: GRAPPLING ARM ASSEMBLY WITH LATCHING MEANS

COMMISSIONER FOR PATENTS:

Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed on:

May 18, 2007



Applicant claims small entity status. See 37 CFR 1.27

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Dated: July 18, 2007

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Before the Board of Patent Appeals and Interferences

In re Application of

John W. Clapper

Serial No. 10/786,295

Filed February 26, 2004

For GRAPPLING ARM ASSEMBLY WITH
LATCHING MEANS

APPEAL BRIEF

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I REAL PARTY IN INTEREST

The real party in interest is Rockland, Inc., a Florida corporation having its principal place of business in the City of Bedford and the Commonwealth of Pennsylvania.

II RELATED APPEALS AND INTERFERENCES

There are no related appeals known to Appellant, Appellant's legal representative or the assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the present appeal.

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Claims 1 through 16 stand rejected. The rejection of such claims is appealed herein.

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No amendment has been filed subsequent to the final rejection of the claims appealed herein.

V SUMMARY OF CLAIMED SUBJECT MATTER

The claimed invention relates to an assembly mountable on a machine having a boom for grappling various objects such as tree trunks, branches, rocks and the like. The invention further relates to an arm member mountable on an underside of a dipper stick of a machine for pivotal movement relative to the dipper stick which cooperates with an implement pivotally connected to the dipper stick for grappling objects such as tree trunks, branches, rocks and the like therebetween.

Independent claim 1 recites a grappling assembly for a machine having a boom comprising a dipper stick pivotally connectable to a boom (reference numerals 12 and 13 in Figures 1 and 2; page 3, lines 17 through 20 of the specification), an implement pivotally connected to the dipper stick (reference numeral 15 in Figures 1 and 2 of the drawings; page 3, line 21 of the specification), means for operatively interconnecting the dipper stick and the implement for pivoting the implement relative to the dipper stick (reference numeral 17 in Figures 1 and 2 of the drawings; page 3, lines 21 and 22, page 4, lines 1 through 8 of the specification), an arm member connected to the underside of the dipper stick, pivotal between an operative position cooperable with the implement for grappling objects between the arm member and the implement when the implement is pivoted for the arm member, and an inoperative position disposed along the underside of the dipper stick (reference numeral 30 in Figures 1 through 6 of the drawings; page 4, lines 9 through 19 of the specification) means operatively interconnecting the underside of the dipper stick and the arm member for pivoting the arm member between the operative and inoperative positions (reference numeral 31 in Figures 1 and 2 of the drawings; page 4, lines 20 through 24, and page 5, lines 1 through 8 of the specification) and means for detachably latching the arm member in the inoperative position including one of the dipper stick and the arm member having at least one transversely disposed recess and the other of the dipper stick and the arm member having a yieldably biased, transversely displaceable protuberance trippable upon engagement of the one of the dipper and the arm member and receivable in the recess when the arm member is pivoted between the operative and inoperative positions (Figures 3 through 8 of the drawings; page 5, lines 9 through 24 and page 6, lines 1 through 12 of the specification).

Independent claim 8 recites an assembly mountable on a dipper stick of a machine having an implement pivotally connected to the dipper stick and means operatively interconnecting the dipper stick and the implement for pivoting the implement relative to the dipper stick comprising an arm member mountable on an underside of the dipper stick for pivotal movement relative to the dipper stick (page 4, lines 9 through 19 of the specification), means mounted on the underside of the dipper stick for pivoting the arm member between an inoperative position and an operative position cooperable with the implement when the implement is pivoted relative to the dipper stick for the arm member to grapple objects between the implement and the arm member (reference numeral 31 in Figures 1 through 6 of the drawings; page 4, lines 20 through 24, and page 5, lines 1 through 8 of the specification) and means for detachably latching the arm member in the inoperative position including a first member mountable on one of the dipper stick and the arm member having at least one transversely extending recess and a second member mountable on the other of the dipper stick and the arm member having a yieldably bias, transversely displaceable protuberance trippable upon engagement by the one of the dipper stick and arm member and receivable in the recess when the arm member is pivoted between the operative and inoperative positions (reference numerals 54 through 61 of Figures 5 through 8 of the drawings; page 5, lines 9 through 16, and page 6, lines 1 through 12 of the specification).

VI GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1 through 16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,111,602 to Joel V. Risch in view of U.S. Patent No. 6,209,237 to Ashley Heiple et al and U.S. Patent No. 3,325,926 to William W. Wilson.

VII ARGUMENT

Each of the claims in the application has been rejected as unpatentable over Risch in view of Heiple et al and Wilson. As understood, it is asserted that it would be obvious to a person having ordinary skill in the art to modify the Risch grappling assembly to mount the arm member on the underside of the dipper stick along with means for displacing such arm member as taught by Heiple et al, and further modify such modified structure by replacing the arm latching means as purportedly taught by Wilson to arrive at the claim structure. Applicant submits that such proposed modification of Risch would not be obvious, and achievable only with the benefit of hindsight in view of Applicant's disclosure.

Initially, it is submitted that the Risch Patent discloses an entirely different construction and operation of an arm member cooperable with a bucket to grasp objects therebetween. As understood, the Risch Patent discloses an assembly consisting of a dipper stick 30; a bucket 44 pivotally connected to the end of the dipper stick, a pair of support links 54a and 54b pivotally connected to the dipper stick, an actuating link 40 operatively interconnecting the support links and the bucket and a cylinder assembly 38 operatively interconnecting the dipper stick and the support links which may be extended and retracted to both curl and uncurl the bucket in the conventional manner. The assembly further includes a clamping device or arm member provided with a pair of arms 50a and 50b which are pivotally connected to the end of the dipper stick coaxially with the pivotal connection of the bucket to the dipper stick, which is operable in an operative position to cooperate with the bucket for grappling objects therebetween, and an inoperative position disposed along the sides of the dipper. A pair of clamp links 16a and 16b further are provided having one set of ends pivotally connected to a pair of plates 89a and 89b

secured to the support links 54a and 54b, and a second set of ends which are adapted to be detachably connected to clamp arms 50a and 50b by means of a connecting pin 57.

In the use of the assembly as described, when it is desired to operate the assembly in a grappling mode, the bucket is curled to the position as shown in Figure 3A, clamp arms 50a and 50b are allowed to swing down and engage the lip of the bucket and clamp links 16a and 16b are connected to the clamp arms by means of connecting pin 57 to thus cause the clamp arms to pivot relative to the bucket upon the operation of cylinder assembly 38. When it is desired to operate the assembly in the excavating mode, with the assembly in the condition as shown in Figure 3A, connecting pin 57 is removed. With the clamp arm thus released from clamp links 16a and 16b, the cylinder assembly is operated to curl the bucket to the position as shown in Figure 3C and correspondingly position the clamp arms 50a and 50b along the sides of the dipper stick with openings in the ends of the clamp arms registering with an opening in a bracket depending from the underside of the dipper so that connecting pin 57 may be inserted therein to secure the clamping arms along the sides and underside of the dipper stick as shown in Figure 3C. The bucket would then be free to be uncurled and curled to perform excavating operations as indicated in Figure 3B.

As noted above the Risch Patent discloses a fairly extensive arrangement for mounting and moving the clamping arms between operative and inoperative positions. To seek to modify such arrangement as purportedly taught by Heiple et al in pivotally connecting the arm member to the underside of the dipper stick and providing a cylinder assembly interconnecting the underside of the dipper stick and the arm member for displacing the arm member between operative and inoperative positions, essentially would result in a total reconstruction of Risch causing it to lose its original identity.

Even assuming that it would be obvious to modify the Risch arrangement as purportedly taught by Heiple et al, it further is submitted that it would not be obvious to a person having ordinary skill in the art to modify the resulting modified Risch structure as purportedly taught by Wilson to arrive at the structure as recited in Applicant's claims. In this regard, initially it is to be noted that although the subject matter of Wilson relates generally to construction equipment, it specifically relates to excavating buckets and more particularly to the mounting of replacement teeth on the cutting blade of a bucket, and not to grappling assemblies.

Each of the claims further specifically recites means for detachably latching the arm member in the inoperative position including a first member mountable on one of the dipper stick and the arm member having at least one transversely extending recess, and a second member mountable on the other of the dipper stick and the arm member having a yieldably biased, transversely displaceable protuberance trippable upon engagement by the one of the dipper stick and the arm member, and receivable in the recess when the arm member is pivoted between the operative and inoperative positions. Clearly, there is no teaching in Wilson for detachably latching an arm member by pivoting the arm member and utilizing a tripping mechanism operatively engaged by the pivoting arm member as recited in the claims in issue. Wilson clearly does not disclose or teach any trippable latching means or the use of a swinging arm for tripping such means. A detailed inspection of such reference reveals that the attachment of a tooth 18 onto a shank member 16 requires the manual depression of locking pins 50 and holding such pins depressed while the tooth member is slid onto the shank member to register the pins with openings 43 in the shank member, thus allowing the pins under the biasing action of the springs to extend into such registered openings. There's no disclosure or teaching in Wilson of the movement of any component between operative and inoperative positions which operates

to trip any retaining pins. Furthermore, as clearly shown in Figures 6, 8 and 9 of the Wilson Patent, the cylindrical side configuration of each of the pins renders them incapable of being tripped by a swinging component displaced between operative and inoperative positions.

Regarding the construction and use of the tooth assembly disclosed and taught by Wilson, the Board's attention particularly is invited to column 3, lines 22 through 36 which state:

...Tooth member 18 may be readily secured to the adapter member 20 by pressing the locking pins 50 inwardly against spring means 52 so that the detents 54 are recessed with the bore 48 at least flushed with the outer surface of ribs 42 and a forward portion 30 of adapter 20 can then be slid into recess 40 with ribs 42 seating in channels 41 where the detents 54 are biased into the apertures 43 when the bore 48 is in register therewith to securely lock the tooth member 18 to the adapter member 20. Removal of the tooth member 18 may be readily accomplished by inward pressure on the detents 54 against the spring means 52 to free the same from the apertures 43 so that the forward portion 30 of the adaptor member 20 may be removed from the recess 40.

Nowhere in the Risch Patent is there any disclosure or teaching of tripping laterally displaceable detents by means of a pivoting member in displacing such pivotal member between operative and inoperative positions.

Even assuming the retaining pins of the Wilson assembly were trippable by a component pivotal between operative and inoperative positions, it is submitted that Wilson still fails to teach the incorporation of any such feature in either the Heiple et al or Risch assemblies considering the facts that the use of pivotal arm members on dipper sticks cooperable with pivotal buckets for grappling objects therebetween have been known for at least 15 years, and the purported teachings of Wilson have been available for almost 40 years yet no one prior to Applicant has sought to apply the purported teachings of Wilson to either or both assemblies shown in Risch and Heiple et al to arrive at the claimed invention.

VIII CONCLUSION

In view of the foregoing, it respectfully is submitted that it will not be obvious to a person having ordinary skill in the art of construction equivalent to modify the Risch Patent as purportedly taught by Heiple et al and Wilson to arrive at the claimed invention, and for such reason, the rejection of Appellant's claims should be reversed.

Respectfully submitted



Peter N. Lalos

Date: July 17, 2007

APPENDIX A:
Claims on Appeal

Appendix A

Claims on Appeal

1. A grappling assembly for a machine having a boom, comprising:
 - a dipper stick pivotally connectable to said boom;
 - an implement pivotally connected to said dipper stick;
 - means operatively interconnecting said dipper stick and said implement for pivoting said implement relative to said dipper stick;
 - an arm member connected to an underside of said dipper stick, pivotal between an operative position cooperable with said implement for grappling objects between said arm member and said implement when said implement is pivoted toward said arm member, and an inoperative position disposed along an underside of said dipper stick;
 - means operatively interconnecting said underside of said dipper stick and said arm member for pivoting said arm member between said operative and inoperative positions; and
 - means for detachably latching said arm member in said inoperative position including one of said dipper stick and said arm member having at least one transversely disposed recess and the other of said dipper stick and said arm member having a yieldably biased, transversely displaceable protuberance trippable upon engagement by said one of said dipper and said arm member and receivable in said recess when said arm member is pivoted between said operative and said inoperative positions.
2. An assembly according to claim 1 wherein said means for pivoting said arm member is receivable within said arm member when said arm member is in said inoperative position.
3. An assembly according to claim 1 wherein said means for pivoting said arm member comprises a fluid actuated cylinder assembly.
4. An assembly according to claim 1 wherein said protuberance comprises a button having a curved outer surface receivable in said recess, and wherein said button is yieldingly biased in a projecting direction by a spring seated in said one of said dipper stick and said arm member.
5. An assembly according to claim 1 wherein said latching means includes a bracket mounted on the underside of said dipper stick having a pair of outwardly, yieldingly biased

protuberances, and surfaces on said arm member provided with recesses registerable with said protuberances when said arm member is in said inoperative position, whereby said protuberances snap-fit into said recesses to displaceably retain said arm member in said inoperative position.

6. An assembly according to claim 1 wherein the biasing force exerted on said protuberance is sufficient to yieldingly bias said protuberance in said recess registered therewith yet insufficient to retain said protuberance therein upon operation of said means for pivoting said arm member from said inoperative position to said operative position.

7. An assembly according to claim 1 wherein said arm member is provided with a jagged surface engageable with an object being grappled.

8. An assembly mountable on a dipper stick of a machine having an implement pivotally connected to said dipper stick and means operatively interconnecting said dipper stick and said implement for pivoting said implement relative to said dipper stick, comprising:

an arm member mountable on an underside of said dipper stick for pivotal movement relative to said dipper stick;

means mounted on said underside of said dipper stick for pivoting said arm member between an inoperative position and an operative position cooperable with said implement when said implement is pivoted relative to said dipper stick toward said arm member to grapple objects between said implement and said arm member; and

means for detachably latching said arm member in said inoperative position including a first member mountable on one of said dipper stick and said arm member having at least one transversely extending recess and a second member mountable on the other of said dipper stick and said arm member having a yieldably biased, transversely displaceable protuberance trippable upon engagement by said one of said dipper stick and said arm member and receivable in said recess when said arm member is pivoted between said operative and said inoperative positions.

9. An assembly according to claim 8 wherein said means for pivoting said arm member is receivable within said arm member when said arm member is in said inoperative position.

10. An assembly according to claim 8 wherein said means for pivoting said arm member comprises a fluid actuated cylinder assembly.

11. An assembly according to claim 8 wherein said protuberance comprises a button having a curved outer surface receivable in said recess, and wherein said button is biased in a projecting direction by a spring seated in said one of said dipper stick and said arm member.

12. An assembly according to claim 8 wherein said latching means includes a bracket mountable on the underside of said dipper stick having a pair of outwardly, yieldably biased protuberances, and surfaces on said arm member provided with recesses registerable with said protuberances when said arm member is in said inoperative position, whereby said protuberances snap-fit into said recesses to displaceably retain said arm member in said inoperative position.

13. An assembly according to claim 8 wherein the biasing force exerted on said protuberance is sufficient to yieldingly bias said protuberance into said recess registered therewith yet insufficient to retain said protuberance therein upon operation of said means for pivoting said arm member from said inoperative position to said operative position.

14. An assembly according to claim 8 wherein said arm member includes a pair of elongated, transversely spaced, plate members, and wherein said means for pivoting said arm member between an inoperative position and an operative position is received between said plate members when said arm member is in said inoperative position.

15. An assembly according to claim 14 wherein said plate members are provided with jagged surfaces engageable with an object being gripped when said arm member is in said operable position.

16. An assembly according to claim 1 wherein said member having said recess includes an element disposed in a plane perpendicular to the pivotal axis of said arm member and including said protuberance biased in an extended position, engageable with said protuberance in camming relation to cause said protuberance to displace and then be inserted into said recess when said arm member is angularly displaced to said inoperative position.

APPENDIX B: Evidence Appendix under 37 CFR § 41.37(c)(1)(ix)

N/A

APPENDIX C: Related Proceedings Appendix under 37 CFR § 41.37(c)(1)(x)

N/A

I REAL PARTY IN INTEREST

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Independent claim 1 recites a grappling assembly for a machine having a boom comprising a dipper stick pivotally connectable to a boom (reference numerals 12 and 13 in Figures 1 and 2; page 3, lines 17 through 20 of the specification), an implement pivotally connected to the dipper stick (reference numeral 15 in Figures 1 and 2 of the drawings; page 3, line 21 of the specification), means for operatively interconnecting the dipper stick and the implement for pivoting the implement relative to the dipper stick (reference numeral 17 in Figures 1 and 2 of the drawings; page 3, lines 21 and 22, page 4, lines 1 through 8 of the specification), an arm member connected to the underside of the dipper stick, pivotal between an operative position cooperable with the implement for grappling objects between the arm member and the implement when the implement is pivoted for the arm member, and an inoperative position disposed along the underside of the dipper stick (reference numeral 30 in Figures 1 through 6 of the drawings; page 4, lines 9 through 19 of the specification) means operatively interconnecting the underside of the dipper stick and the arm member for pivoting the arm member between the operative and inoperative positions (reference numeral 31 in Figures 1 and 2 of the drawings; page 4, lines 20 through 24, and page 5, lines 1 through 8 of the specification) and means for detachably latching the arm member in the inoperative position including one of the dipper stick and the arm member having at least one transversely disposed recess and the other of the dipper stick and the arm member having a yieldably biased, transversely displaceable protuberance trippable upon engagement of the one of the dipper and the arm member and receivable in the recess when the arm member is pivoted between the operative and inoperative positions (Figures 3 through 8 of the drawings; page 5, lines 9 through 24 and page 6, lines 1 through 12 of the specification).

Independent claim 8 recites an assembly mountable on a dipper stick of a machine having an implement pivotally connected to the dipper stick and means operatively interconnecting the dipper stick and the implement for pivoting the implement relative to the dipper stick comprising an arm member mountable on an underside of the dipper stick for pivotal movement relative to the dipper stick (page 4, lines 9 through 19 of the specification), means mounted on the underside of the dipper stick for pivoting the arm member between an inoperative position and an operative position cooperable with the implement when the implement is pivoted relative to the dipper stick for the arm member to grapple objects between the implement and the arm member (reference numeral 31 in Figures 1 through 6 of the drawings; page 4, lines 20 through 24, and page 5, lines 1 through 8 of the specification) and means for detachably latching the arm member in the inoperative position including a first member mountable on one of the dipper stick and the arm member having at least one transversely extending recess and a second member mountable on the other of the dipper stick and the arm member having a yieldably bias, transversely displaceable protuberance trippable upon engagement by the one of the dipper stick and arm member and receivable in the recess when the arm member is pivoted between the operative and inoperative positions (reference numerals 54 through 61 of Figures 5 through 8 of the drawings; page 5, lines 9 through 16, and page 6, lines 1 through 12 of the specification).

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Each of the claims in the application has been rejected as unpatentable over Risch in view of Heiple et al and Wilson. As understood, it is asserted that it would be obvious to a person having ordinary skill in the art to modify the Risch grapping assembly to mount the arm member on the underside of the dipper stick along with means for displacing such arm member as taught by Heiple et al, and further modify such modified structure by replacing the arm latching means as purportedly taught by Wilson to arrive at the claim structure. Applicant submits that such proposed modification of Risch would not be obvious, and achievable only with the benefit of hindsight in view of Applicant's disclosure.

Initially, it is submitted that the Risch Patent discloses an entirely different construction and operation of an arm member cooperable with a bucket to grasp objects therebetween. As understood, the Risch Patent discloses an assembly consisting of a dipper stick 30; a bucket 44 pivotally connected to the end of the dipper stick, a pair of support links 54a and 54b pivotally connected to the dipper stick, an actuating link 40 operatively interconnecting the support links and the bucket and a cylinder assembly 38 operatively interconnecting the dipper stick and the support links which may be extended and retracted to both curl and uncurl the bucket in the conventional manner. The assembly further includes a clamping device or arm member provided with a pair of arms 50a and 50b which are pivotally connected to the end of the dipper stick coaxially with the pivotal connection of the bucket to the dipper stick, which is operable in an operative position to cooperate with the bucket for grapping objects therebetween, and an inoperative position disposed along the sides of the dipper. A pair of clamp links 16a and 16b further are provided having one set of ends pivotally connected to a pair of plates 89a and 89b

secured to the support links 54a and 54b, and a second set of ends which are adapted to be detachably connected to clamp arms 50a and 50b by means of a connecting pin 57.

In the use of the assembly as described, when it is desired to operate the assembly in a grappling mode, the bucket is curled to the position as shown in Figure 3A, clamp arms 50a and 50b are allowed to swing down and engage the lip of the bucket and clamp links 16a and 16b are connected to the clamp arms by means of connecting pin 57 to thus cause the clamp arms to pivot relative to the bucket upon the operation of cylinder assembly 38. When it is desired to operate the assembly in the excavating mode, with the assembly in the condition as shown in Figure 3A, connecting pin 57 is removed. With the clamp arm thus released from clamp links 16a and 16b, the cylinder assembly is operated to curl the bucket to the position as shown in Figure 3C and correspondingly position the clamp arms 50a and 50b along the sides of the dipper stick with openings in the ends of the clamp arms registering with an opening in a bracket depending from the underside of the dipper so that connecting pin 57 may be inserted therein to secure the clamping arms along the sides and underside of the dipper stick as shown in Figure 3C. The bucket would then be free to be uncurled and curled to perform excavating operations as indicated in Figure 3B.

As noted above the Risch Patent discloses a fairly extensive arrangement for mounting and moving the clamping arms between operative and inoperative positions. To seek to modify such arrangement as purportedly taught by Heiple et al in pivotally connecting the arm member to the underside of the dipper stick and providing a cylinder assembly interconnecting the underside of the dipper stick and the arm member for displacing the arm member between operative and inoperative positions, essentially would result in a total reconstruction of Risch causing it to lose its original identity.

Even assuming that it would be obvious to modify the Risch arrangement as purportedly taught by Heiple et al, it further is submitted that it would not be obvious to a person having ordinary skill in the art to modify the resulting modified Risch structure as purportedly taught by Wilson to arrive at the structure as recited in Applicant's claims. In this regard, initially it is to be noted that although the subject matter of Wilson relates generally to construction equipment, it specifically relates to excavating buckets and more particularly to the mounting of replacement teeth on the cutting blade of a bucket, and not to grappling assemblies.

Each of the claims further specifically recites means for detachably latching the arm member in the inoperative position including a first member mountable on one of the dipper stick and the arm member having at least one transversely extending recess, and a second member mountable on the other of the dipper stick and the arm member having a yieldably biased, transversely displaceable protuberance trippable upon engagement by the one of the dipper stick and the arm member, and receivable in the recess when the arm member is pivoted between the operative and inoperative positions. Clearly, there is no teaching in Wilson for detachably latching an arm member by pivoting the arm member and utilizing a tripping mechanism operatively engaged by the pivoting arm member as recited in the claims in issue. Wilson clearly does not disclose or teach any trippable latching means or the use of a swinging arm for tripping such means. A detailed inspection of such reference reveals that the attachment of a tooth 18 onto a shank member 16 requires the manual depression of locking pins 50 and holding such pins depressed while the tooth member is slid onto the shank member to register the pins with openings 43 in the shank member, thus allowing the pins under the biasing action of the springs to extend into such registered openings. There's no disclosure or teaching in Wilson of the movement of any component between operative and inoperative positions which operates

to trip any retaining pins. Furthermore, as clearly shown in Figures 6, 8 and 9 of the Wilson Patent, the cylindrical side configuration of each of the pins renders them incapable of being tripped by a swinging component displaced between operative and inoperative positions.

Regarding the construction and use of the tooth assembly disclosed and taught by Wilson, the Board's attention particularly is invited to column 3, lines 22 through 36 which state:

...Tooth member 18 may be readily secured to the adapter member 20 by pressing the locking pins 50 inwardly against spring means 52 so that the detents 54 are recessed with the bore 48 at least flushed with the outer surface of ribs 42 and a forward portion 30 of adapter 20 can then be slid into recess 40 with ribs 42 seating in channels 41 where the detents 54 are biased into the apertures 43 when the bore 48 is in register therewith to securely lock the tooth member 18 to the adapter member 20. Removal of the tooth member 18 may be readily accomplished by inward pressure on the detents 54 against the spring means 52 to free the same from the apertures 43 so that the forward portion 30 of the adaptor member 20 may be removed from the recess 40.

Nowhere in the Risch Patent is there any disclosure or teaching of tripping laterally displaceable detents by means of a pivoting member in displacing such pivotal member between operative and inoperative positions.

Even assuming the retaining pins of the Wilson assembly were trippable by a component pivotal between operative and inoperative positions, it is submitted that Wilson still fails to teach the incorporation of any such feature in either the Heiple et al or Risch assemblies considering the facts that the use of pivotal arm members on dipper sticks cooperable with pivotal buckets for grappling objects therebetween have been known for at least 15 years, and the purported teachings of Wilson have been available for almost 40 years yet no one prior to Applicant has sought to apply the purported teachings of Wilson to either or both assemblies shown in Risch and Heiple et al to arrive at the claimed invention.

VIII CONCLUSION

In view of the foregoing, it respectfully is submitted that it will not be obvious to a person having ordinary skill in the art of construction equivalent to modify the Risch Patent as purportedly taught by Heiple et al and Wilson to arrive at the claimed invention, and for such reason, the rejection of Appellant's claims should be reversed.

Respectfully submitted



Peter N. Lalos

Date: July 17, 2007

APPENDIX A:
Claims on Appeal

Appendix A

Claims on Appeal

1. A grappling assembly for a machine having a boom, comprising:
 - a dipper stick pivotally connectable to said boom;
 - an implement pivotally connected to said dipper stick;
 - means operatively interconnecting said dipper stick and said implement for pivoting said implement relative to said dipper stick;
 - an arm member connected to an underside of said dipper stick, pivotal between an operative position cooperable with said implement for grappling objects between said arm member and said implement when said implement is pivoted toward said arm member, and an inoperative position disposed along an underside of said dipper stick;
 - means operatively interconnecting said underside of said dipper stick and said arm member for pivoting said arm member between said operative and inoperative positions; and
 - means for detachably latching said arm member in said inoperative position including one of said dipper stick and said arm member having at least one transversely disposed recess and the other of said dipper stick and said arm member having a yieldably biased, transversely displaceable protuberance trippable upon engagement by said one of said dipper and said arm member and receivable in said recess when said arm member is pivoted between said operative and said inoperative positions.
2. An assembly according to claim 1 wherein said means for pivoting said arm member is receivable within said arm member when said arm member is in said inoperative position.
3. An assembly according to claim 1 wherein said means for pivoting said arm member comprises a fluid actuated cylinder assembly.
4. An assembly according to claim 1 wherein said protuberance comprises a button having a curved outer surface receivable in said recess, and wherein said button is yieldingly biased in a projecting direction by a spring seated in said one of said dipper stick and said arm member.
5. An assembly according to claim 1 wherein said latching means includes a bracket mounted on the underside of said dipper stick having a pair of outwardly, yieldingly biased

protuberances, and surfaces on said arm member provided with recesses registerable with said protuberances when said arm member is in said inoperative position, whereby said protuberances snap-fit into said recesses to displaceably retain said arm member in said inoperative position.

6. An assembly according to claim 1 wherein the biasing force exerted on said protuberance is sufficient to yieldingly bias said protuberance in said recess registered therewith yet insufficient to retain said protuberance therein upon operation of said means for pivoting said arm member from said inoperative position to said operative position.

7. An assembly according to claim 1 wherein said arm member is provided with a jagged surface engageable with an object being grappled.

8. An assembly mountable on a dipper stick of a machine having an implement pivotally connected to said dipper stick and means operatively interconnecting said dipper stick and said implement for pivoting said implement relative to said dipper stick, comprising:

an arm member mountable on an underside of said dipper stick for pivotal movement relative to said dipper stick;

means mounted on said underside of said dipper stick for pivoting said arm member between an inoperative position and an operative position cooperable with said implement when said implement is pivoted relative to said dipper stick toward said arm member to grapple objects between said implement and said arm member; and

means for detachably latching said arm member in said inoperative position including a first member mountable on one of said dipper stick and said arm member having at least one transversely extending recess and a second member mountable on the other of said dipper stick and said arm member having a yieldably biased, transversely displaceable protuberance trippable upon engagement by said one of said dipper stick and said arm member and receivable in said recess when said arm member is pivoted between said operative and said inoperative positions.

9. An assembly according to claim 8 wherein said means for pivoting said arm member is receivable within said arm member when said arm member is in said inoperative position.

10. An assembly according to claim 8 wherein said means for pivoting said arm member comprises a fluid actuated cylinder assembly.

11. An assembly according to claim 8 wherein said protuberance comprises a button having a curved outer surface receivable in said recess, and wherein said button is biased in a projecting direction by a spring seated in said one of said dipper stick and said arm member.

12. An assembly according to claim 8 wherein said latching means includes a bracket mountable on the underside of said dipper stick having a pair of outwardly, yieldably biased protuberances, and surfaces on said arm member provided with recesses registerable with said protuberances when said arm member is in said inoperative position, whereby said protuberances snap-fit into said recesses to displaceably retain said arm member in said inoperative position.

13. An assembly according to claim 8 wherein the biasing force exerted on said protuberance is sufficient to yieldingly bias said protuberance into said recess registered therewith yet insufficient to retain said protuberance therein upon operation of said means for pivoting said arm member from said inoperative position to said operative position.

14. An assembly according to claim 8 wherein said arm member includes a pair of elongated, transversely spaced, plate members, and wherein said means for pivoting said arm member between an inoperative position and an operative position is received between said plate members when said arm member is in said inoperative position.

15. An assembly according to claim 14 wherein said plate members are provided with jagged surfaces engageable with an object being gripped when said arm member is in said operable position.

16. An assembly according to claim 1 wherein said member having said recess includes an element disposed in a plane perpendicular to the pivotal axis of said arm member and including said protuberance biased in an extended position, engageable with said protuberance in camming relation to cause said protuberance to displace and then be inserted into said recess when said arm member is angularly displaced to said inoperative position.

APPENDIX B: Evidence Appendix under 37 CFR § 41.37(c)(1)(ix)

N/A

APPENDIX C: Related Proceedings Appendix under 37 CFR § 41.37(c)(1)(x)

N/A